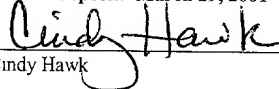


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I hereby certify that this paper or fee is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and is addressed to the BOX PATENT APPLICATION, Assistant Commissioner for Patents, Washington, D. C. 20231.

Date of Deposit: March 29, 2001


Cindy Hawk

Attorney Docket No. 11000.1037c3
PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the application of **Lorna Strachan, Matthew Sleeman, Nevin Abernethy, Rene Onrust, Anand Kumble, and Greg Murison**

Application No. : Unassigned Group Art Unit: Unassigned

Filed : Herewith

For : **COMPOSITIONS ISOLATED FROM STROMAL CELLS AND METHODS FOR THEIR USE**

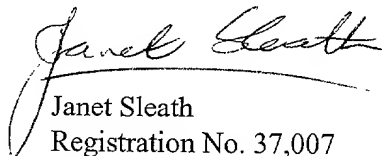
STATEMENT – SEQUENCE LISTING TRANSMITTAL

Assistant Commissioner for Patents
Washington D.C. 20231

Sir:

The undersigned verifies that, to the best of her knowledge, after making a comparison, the content of the accompanying paper sequence listing and computer readable sequence listing is the same.

Respectfully submitted,


Janet Sleath
Registration No. 37,007

Date: March 29, 2001
SPECKMAN LAW GROUP



20601

PATENT TRADEMARK OFFICE

SEQUENCE LISTING

<110> Strachan, Lorna
Sleeman, Matthew
Abernethy, Nevin
Onrust, Rene
Kumble, Anand
Murison, Greg

<120> Compositions isolated from stromal cells
and methods for their use.

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 Cys Gly Pro Cys Ser Thr Thr Ser Pro Ser Thr Trp Val Leu Cys Pro
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 Leu Pro Met Ser Pro Leu Cys Pro Thr Cys Val Ser Thr Met Thr Leu
 50 55 60
 Ala Thr Cys Thr Cys Pro Trp Ser Thr Thr Cys Pro Cys Thr Leu Ala
 65 70 75 80
 Pro Asn His Gly Ile Ala Ser Asp Thr Gln Ser Pro Val Ser Arg Ala
 85 90 95
 Glu Ser Val Gly Gly Pro Ser Leu Ile Phe
 100 105

<210> 14
 <211> 268
 <212> PRT
 <213> Mouse

<400> 14
 Met Ala Leu Gly Phe Ser Gln Arg Ser Arg Met Val Ala Ala Gly Ala
 1 5 10 15
 Gly Val Thr Arg Leu Leu Val Leu Leu Met Val Ala Ala Pro
 20 25 30
 Ser Arg Ala Arg Gly Ser Gly Cys Arg Val Gly Ala Ser Ala Arg Gly
 35 40 45
 Thr Gly Ala Asp Gly Arg Glu Ala Glu Gly Cys Gly Thr Val Ala Leu
 50 55 60
 Leu Leu Glu His Ser Phe Glu Leu Gly Asp Gly Ala Asn Phe Gln Lys
 65 70 75 80
 Arg Gly Leu Leu Leu Trp Asn Gln Gln Asp Gly Thr Leu Ser Ala Thr
 85 90 95
 Gln Arg Gln Leu Ser Glu Glu Glu Arg Gly Arg Leu Arg Asp Val Ala
 100 105 110
 Ala Val Asn Gly Leu Tyr Arg Val Arg Val Pro Arg Arg Pro Gly Thr
 115 120 125
 Leu Asp Gly Ser Glu Ala Gly Gly His Val Ser Ser Phe Val Pro Ala
 130 135 140
 Cys Ser Leu Val Glu Ser His Leu Ser Asp Gln Leu Thr Leu His Val
 145 150 155 160
 Asp Val Ala Gly Asn Val Val Gly Leu Ser Val Val Val Tyr Pro Gly
 165 170 175
 Gly Cys Arg Gly Ser Glu Val Glu Asp Glu Asp Leu Glu Leu Phe Asn
 180 185 190
 Thr Ser Val Gln Leu Arg Pro Pro Ser Thr Ala Pro Gly Pro Glu Thr
 195 200 205
 Ala Ala Phe Ile Glu Arg Leu Glu Met Glu Gln Ala Gln Lys Ala Lys
 210 215 220
 Asn Pro Gln Glu Gln Lys Ser Phe Phe Ala Lys Tyr Trp Met Tyr Ile
 225 230 235 240
 Ile Pro Val Val Leu Phe Leu Met Met Ser Gly Ala Pro Asp Ala Gly
 245 250 255
 Gly Gln Gly Gly Gly Gly Gly Gly Ser Ser Arg
 260 265

<210> 15
 <211> 66
 <212> PRT
 <213> Mouse

<400> 15
 Met Asp Phe Leu Val Leu Phe Leu Phe Tyr Leu Ala Phe Leu Leu Ile
 1 5 10 15
 Cys Val Val Leu Ile Cys Ile Phe Thr Lys Ser Gln Arg Leu Lys Ala
 20 25 30
 Val Val Leu Gly Gly Ala Gln Val Ala Leu Val Leu Gly Tyr Cys Pro
 35 40 45
 Asp Val Asn Thr Val Leu Gly Ala Ser Leu Glu Gly Ser Gln Asp Lys
 50 55 60
 Gly Met
 65

<210> 16
 <211> 338
 <212> PRT
 <213> Mouse

<400> 16
 Met Gly Ala Val Trp Ser Ala Leu Leu Val Gly Gly Gly Leu Ala Gly
 1 5 10 15
 Ala Leu Ile Leu Trp Leu Leu Arg Gly Asp Ser Gly Ala Pro Gly Lys
 20 25 30
 Asp Gly Val Ala Glu Pro Pro Gln Lys Gly Ala Pro Pro Gly Glu Ala
 35 40 45
 Ala Ala Pro Gly Asp Gly Pro Gly Gly Gly Gly Ser Gly Gly Leu Ser
 50 55 60
 Pro Glu Pro Ser Asp Arg Glu Leu Val Ser Lys Ala Glu His Leu Arg
 65 70 75 80
 Glu Ser Asn Gly His Leu Ile Ser Glu Ser Lys Asp Leu Gly Asn Leu
 85 90 95
 Pro Glu Ala Gln Arg Leu Gln Asn Val Gly Ala Asp Trp Val Asn Ala
 100 105 110
 Arg Glu Phe Val Pro Val Gly Lys Ile Pro Asp Thr His Ser Arg Ala
 115 120 125
 Asp Ser Glu Ala Ala Arg Asn Gln Ser Pro Gly Ser His Gly Gly Glu
 130 135 140
 Trp Arg Leu Pro Lys Gly Gln Glu Thr Ala Val Lys Val Ala Gly Ser
 145 150 155 160
 Val Ala Ala Lys Leu Ala Ser Ser Ser Leu Leu Val Asp Arg Ala Lys
 165 170 175
 Ala Val Ser Gln Asp Gln Ala Gly His Glu Asp Trp Glu Val Val Ser
 180 185 190
 Arg His Ser Ser Trp Gly Ser Val Gly Leu Gly Gly Ser Leu Glu Ala
 195 200 205
 Ser Arg Leu Ser Leu Asn Gln Arg Met Asp Asp Ser Thr Asn Ser Leu
 210 215 220
 Val Gly Gly Arg Gly Trp Glu Val Asp Gly Lys Val Ala Ser Leu Lys
 225 230 235 240
 Pro Gln Gln Val Ser Ile Gln Phe Gln Val His Tyr Thr Thr Asn Thr
 245 250 255
 Asp Val Gln Phe Ile Ala Val Thr Gly Asp His Glu Ser Leu Gly Arg
 260 265 270

Trp Asn Thr Tyr Ile Pro Leu His Tyr Cys Lys Asp Gly Leu Trp Ser
 275 280 285
 His Ser Val Phe Leu Pro Ala Asp Thr Val Val Glu Trp Lys Phe Val
 290 295 300
 Leu Val Glu Asn Lys Glu Val Thr Arg Trp Glu Glu Cys Ser Asn Arg
 305 310 315 320
 Phe Leu Gln Thr Gly His Glu Asp Lys Val Val His Gly Trp Trp Gly
 325 330 335
 Ile His

<210> 17
 <211> 119
 <212> PRT
 <213> Mouse

<400> 17
 Gly Thr Ser Pro Ala Ser Val Leu Arg Ser Val Ser Ser Asp Pro Ser
 1 5 10 15
 Leu Pro Pro Pro Ser Met Ala Ser Leu Leu Cys Cys Gly Pro Lys Leu
 20 25 30
 Ala Ala Cys Gly Ile Val Leu Ser Ala Trp Gly Val Ile Met Leu Ile
 35 40 45
 Met Leu Gly Ile Phe Phe Asn Val His Ser Ala Val Leu Ile Glu Asp
 50 55 60
 Val Pro Phe Thr Glu Lys Asp Phe Glu Asn Gly Pro Gln Asn Ile Tyr
 65 70 75 80
 Asn Leu Tyr Glu Gln Val Ser Tyr Asn Cys Phe Ile Ala Ala Gly Leu
 85 90 95
 Tyr Leu Leu Leu Gly Gly Phe Ser Phe Cys Gln Val Arg Leu Asn Lys
 100 105 110
 Arg Lys Glu Tyr Met Val Arg
 115

<210> 18
 <211> 280
 <212> PRT
 <213> Mouse

<400> 18
 Met Val Pro Trp Phe Leu Leu Ser Leu Leu Leu Leu Ala Arg Pro Val
 1 5 10 15
 Pro Gly Val Ala Tyr Ser Val Ser Leu Pro Ala Ser Phe Leu Glu Asp
 20 25 30
 Val Ala Gly Ser Gly Glu Ala Glu Gly Ser Ser Ala Ser Ser Pro Ser
 35 40 45
 Leu Pro Pro Pro Gly Thr Pro Ala Phe Ser Pro Thr Pro Glu Arg Pro
 50 55 60
 Gln Pro Thr Ala Leu Asp Gly Pro Val Pro Pro Thr Asn Leu Leu Glu
 65 70 75 80
 Gly Ile Met Asp Phe Phe Arg Gln Tyr Val Met Leu Ile Ala Val Val
 85 90 95
 Gly Ser Leu Thr Phe Leu Ile Met Phe Ile Val Cys Ala Ala Leu Ile
 100 105 110
 Thr Arg Gln Lys His Lys Ala Thr Ala Tyr Tyr Pro Ser Ser Phe Pro
 115 120 125
 Glu Lys Lys Tyr Val Asp Gln Arg Asp Arg Ala Gly Gly Pro Arg Thr

130		135		140
Phe Ser Glu Val Pro Asp Arg Ala Pro Asp Ser Arg His Glu Glu Gly				
145		150		155
Leu Asp Thr Ser His Gln Leu Gln Ala Asp Ile Leu Ala Ala Thr Gln				160
	165		170	
Asn Leu Arg Ser Pro Ala Arg Ala Leu Pro Gly Asn Gly Glu Gly Ala				175
	180		185	190
Lys Pro Val Lys Gly Gly Ser Glu Glu Glu Glu Glu Glu Val Leu Ser				
	195		200	205
Gly Gln Glu Glu Ala Gln Glu Ala Pro Val Cys Gly Val Thr Glu Glu				
	210		215	220
Lys Leu Gly Val Pro Glu Glu Ser Val Ser Ala Glu Ala Glu Gly Val				
225		230		235
Pro Ala Thr Ser Glu Gly Gln Gly Glu Ala Glu Gly Ser Phe Ser Leu				240
	245		250	255
Ala Gln Glu Ser Gln Gly Ala Thr Gly Pro Pro Glu Ser Pro Cys Ala				260
	260		265	270
Cys Asn Arg Val Ser Pro Ser Val				
	275		280	

<210> 19
 <211> 188
 <212> PRT
 <213> Mouse

<400> 19
Met Ala Leu Cys Ala Arg Ala Ala Leu Leu Leu Gly Val Leu Gln Val
1 5 10 15
Leu Ala Leu Leu Gly Ala Ala Gln Asp Pro Thr Asp Ala Gln Gly Ser
20 25 30
Ala Ser Gly Asn His Ser Val Leu Thr Ser Asn Ile Asn Ile Thr Glu
35 40 45
Asn Thr Asn Gln Thr Met Ser Val Val Ser Asn Gln Thr Ser Glu Met
50 55 60
Gln Ser Thr Ala Lys Pro Ser Val Leu Pro Lys Thr Thr Thr Leu Ile
65 70 75 80
Thr Val Lys Pro Ala Thr Ile Val Lys Ile Ser Thr Pro Gly Val Leu
85 90 95
Pro His Val Thr Pro Thr Ala Ser Lys Ser Thr Pro Asn Ala Ser Ala
100 105 110
Ser Pro Asn Ser Thr His Thr Ser Ala Ser Met Thr Thr Pro Ala His
115 120 125
Ser Ser Leu Leu Thr Thr Val Thr Val Ser Ala Thr Thr His Pro Thr
130 135 140
Lys Gly Lys Gly Ser Lys Phe Asp Ala Gly Ser Phe Val Gly Gly Ile
145 150 155 160
Gly Val Asn Thr Gly Ser Phe Ile Tyr Ser Leu His Trp Met Gln Asn
165 170 175
Val Leu Phe Lys Lys Arg His Ser Val Pro Lys His
180 185

<210> 20
 <211> 317
 <212> PRT
 <213> Mouse

<400> 20

Met Arg Ser Gly Ala Leu Trp Pro Leu Leu Trp Gly Ala Leu Val Trp
1 5 10 15
Thr Val Gly Ser Val Gly Ala Val Met Gly Ser Glu Asp Ser Val Pro
20 25 30
Gly Gly Val Cys Trp Leu Gln Gln Gly Arg Glu Ala Thr Cys Ser Leu
35 40 45
Val Leu Lys Thr Arg Val Ser Arg Glu Glu Cys Cys Ala Ser Gly Asn
50 55 60
Ile Asn Thr Ala Trp Ser Asn Phe Thr His Pro Gly Asn Lys Ile Ser
65 70 75 80
Leu Leu Gly Phe Leu Gly Leu Val His Cys Leu Pro Cys Lys Asp Ser
85 90 95
Cys Asp Gly Val Glu Cys Gly Pro Gly Lys Ala Cys Arg Asn Ala Gly
100 105 110
Gly Ala Ser Asn Asn Cys Glu Cys Val Pro Asn Cys Glu Gly Phe Pro
115 120 125
Ala Gly Phe Gln Val Cys Gly Ser Asp Gly Ala Thr Tyr Arg Asp Glu
130 135 140
Cys Glu Leu Arg Thr Ala Arg Cys Arg Gly His Pro Asp Leu Arg Val
145 150 155 160
Met Tyr Arg Gly Arg Cys Gln Lys Ser Cys Ala Gln Val Val Cys Pro
165 170 175
Arg Pro Gln Ser Cys Leu Val Asp Gln Thr Gly Ser Ala His Cys Val
180 185 190
Val Cys Arg Ala Ala Pro Cys Pro Val Pro Ser Asn Pro Gly Gln Glu
195 200 205
Leu Cys Gly Asn Asn Asn Val Thr Tyr Ile Ser Ser Cys His Leu Arg
210 215 220
Gln Ala Thr Cys Phe Leu Gly Arg Ser Ile Gly Val Arg His Pro Gly
225 230 235 240
Ile Cys Thr Gly Gly Pro Lys Phe Leu Lys Ser Gly Asp Ala Ala Ile
245 250 255
Val Asp Met Val Pro Gly Lys Pro Met Cys Val Glu Ser Phe Ser Asp
260 265 270
Tyr Pro Pro Leu Gly Arg Phe Ala Val Arg Asp Met Arg Gln Thr Val
275 280 285
Ala Val Gly Val Ile Lys Ala Val Asp Lys Lys Ala Ala Gly Ala Gly
290 295 300
Lys Val Thr Lys Ser Ala Gln Lys Ala Gln Lys Ala Lys
305 310 315

<210> 21

<211> 384

<212> DNA

<213> Mouse

<220>

<221> unsure

<222> (369)...(369)

<400> 21

ggtggacttc	ggtgggacaa	cgtccttcca	gtgcaagggtg	cgcagtgacg	tgaagcctgt	60
gatccagtg	ctgaagcggg	tggagtacgg	ctccgagggga	cgccacaact	ccaccattga	120
tgtgggtggc	cagaagtttg	tgggtgttgc	cacgggtgat	gtgtgggtcac	ggcctgatgg	180
ctcctacctc	aacaagctgc	tcctctctcg	ggcccggccag	gatgatgctg	gcatgtacat	240
ctgcctaggt	gcaaatacca	tgggctacag	tttccgtagc	gccttctctca	ctgtattacc	300
agaccccaaa	ctccaggggc	ctcctatggc	ttcttcatcg	tcatccacaa	gcctgccatg	360

<210> 22
 <211> 1967
 <212> DNA
 <213> Mouse

<400> 22

gctgcgcgc	cccgcgctga	tccctgtcga	gcgtctacgc	gcctcgcttc	ctttgcctgg	60
agctcggcgc	cgaggggggc	cggaccctgg	ctctgcggcc	gcgacctggg	tcttgcgggc	120
ctgagccctg	agtggcgctc	agtccagctc	ccagtgaccg	cgccccctgt	tcagggtccga	180
ccggcgagat	gacgcggagc	cccgcgctgc	tgctgctgct	attggggggc	ctcccgtcgg	240
ctgaggcggc	gcgaggacc	ccaagaatgg	cagacaaagt	ggccccacgg	cagggtggccc	300
gcctggggccg	cactgtgcgg	ctacagtgcc	cagtggaggg	ggaccaccca	ccgttgacca	360
tgtggaccaa	agatggccgc	acaatccaca	gtggctggag	ccgcttccgt	gtgctgcccc	420
aggggtctgaa	ggggaaggag	gtggaggccg	aggatgccgg	tgtttatgtg	tgcaaggcca	480
ccaatggctt	tggcagcctc	agcgtcaact	acactctcat	catcatggat	gatattagtc	540
cagggaagga	gagccctggg	ccagggtggt	cttcgggggg	ccaggaggac	ccagccagcc	600
agcagtgggc	acggcctcgc	ttcacacagc	cctccaagat	gaggcgccga	gtgattgcac	660
ggcctgtggg	tagctctgtg	cggctcaagt	gtgtggccag	tgggcaccca	cggccagaca	720
tcatgtggat	gaaggatgac	cagaccttga	cgcacttaga	ggctagtga	cacagaaaga	780
agaagtggac	actgagcttg	aagaacctga	agcctgaaga	cagtggcaag	tacacgtgcc	840
gtgtatctaa	caaggccggg	gccatcaacg	ccacctacaa	agtggatgta	atccagcgga	900
ctcgttccaa	gctgtgctc	acagggacac	accctgtgaa	cacaacggtg	gacttcggtg	960
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agcgggtgga	gtacggctcc	gagggacgcc	acaactccac	cattgatgtg	ggtagccaga	1080
agtttgtggg	gttgcccacg	ggtagatgtg	ggtcacggcc	tgatggctcc	tacctcaaca	1140
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cagggcctcc	tatggcttct	tcctcgtcat	ccacaagcct	gccatggcct	gtgggtgatcg	1320
gcatcccagc	tggtgctgtc	ttcatcctag	gcactgtgct	gctctggctt	tgccagacca	1380
agaagaagcc	atgtgcccc	gcatctacac	ttcctgtgcc	tgggcacgtg	cccccaggga	1440
catcccagga	acgcagtggt	gacaaggacc	tgcctcatt	ggctgtgggc	atatgtgagg	1500
agcatggatc	cggcatggcc	ccccagcaca	tcctggcctc	tggctcaact	gctggcccca	1560
agctgtaccc	caagctatac	acagatgtgc	acacacacac	acatacacac	acctgcactc	1620
acacgctctc	atgtggaggg	caaggttcat	caacaccagc	atgtccacta	tcagtgtctaa	1680
atacagcgaa	tctccaagca	ctgtgtcctg	aggtaggcac	atggggggcca	aggcaacagg	1740
ttggggagaat	tgagaacaat	ggaggaagag	tatcttaggg	tgccttatgg	tggaactca	1800
caaacttggc	catatagatg	tatgtactac	cagatgaaca	gccagccaga	ttcacacacg	1860
cacatgttta	aacgtgtaaa	cgtgtgcaca	actgcacaca	caacctgaga	aaccttcagg	1920
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<210> 23
 <211> 1742
 <212> DNA
 <213> Mouse

<400> 23

gcgcggcgcc	ccggggccct	cgccccgcgc	ccccctcttc	ccgcctctgc	caagcctcgc	60
cgtttatccg	cgcgacagc	gcgccccgcg	ccccagcccg	gccctagccg	ccagcgccca	120
ggtagcgccg	cccgcgccag	gcggggcccg	ggggcgcggg	gggcgggatg	cggcgcccg	180
ggcagcgatg	accgcgtcgc	gctgctcagg	ggcccggtct	tgaccccggt	gcctgctgcg	240
cgcccccgcg	ctgatccctg	tcgagcgtct	acgcgcctcg	cttcctttgc	ctggagctcg	300
gcgccgaggg	gggcccggacc	ctggtctctg	ggccgcgacc	tgggtcttgc	gggcctgagc	360
cctgagtggc	gtccagtcca	gctcccagtg	accgcgcccc	tgcttcagggt	ccgaccggcg	420
agatgacgcg	gagccccgcg	ctgctgctgc	tgctattggg	ggccctcccc	tcggctgagg	480
cggcgcgaga	tgatattag	ccagggaagg	agagccctgg	gccagggtgg	tcttcggggg	540

gccaggagga	cccagccagc	cagcagtggg	cacggcctcg	cttcacacag	ccctccaaga	600
tgaggcgccg	agtgattgca	cggcctgtgg	gtagctctgt	gcggctcaag	tgtgtggcca	660
gtgggcaccc	acggccagac	atcatgtgga	tgaaggatga	ccagaccttg	acgcatctag	720
aggctagtga	acacagaaaag	aagaagtgga	cactgagctt	gaagaacctg	aagcctgaag	780
acagtggcaa	gtacacgtgc	cgtgtatcta	acaaggccgg	tgccatcaac	gccacctaca	840
aagtggatgt	aatccagcgg	actcgttcca	agcctgtgct	cacagggaca	caccctgtga	900
acacaacggt	ggacttcggt	gggacaacgt	ccttccagtg	caagggtgcg	agtgacgtga	960
agcctgtgat	ccagtggctg	aagcgggtgg	agtacggctc	cgaggggacgc	cacaactcca	1020
ccattgatgt	gggtggccag	aagtttgtgg	tgttgcccac	gggtgatgtg	tggtcacggc	1080
ctgatggctc	ctacctcaac	aagctgctca	tctctcgggc	ccgccaggat	gatgctggca	1140
tgtacatctg	cctaggtgca	aataccatgg	gctacagttt	ccgtagcgcc	ttcctcactg	1200
tattaccaga	ccccaaacct	cctccagggc	ctcctatggc	ttcttcatcg	tcattccaca	1260
gcctgccatg	gcctgtggtg	atcggcatcc	cagctgggtg	tgtcttcatc	ctaggcactg	1320
tgctgctctg	gctttgccag	accaagaaga	agccatgtgc	cccagcatct	acacttcctg	1380
tgcttgggca	tcgtccccc	gggacatccc	gagaacgcag	tggtgacaag	gacctgccct	1440
cattggctgt	gggcatatgt	gaggagcatg	gatccgccat	ggccccccag	cacatcctgg	1500
cctctggctc	aactgctggc	cccaagctgt	accccaagct	atacacagat	gtgcacacac	1560
acacacatac	acacacctgc	actcacacgc	tctcatgtgg	agggcaaggt	tcattcaaac	1620
cagcatgtcc	actatcagtg	ctaaatacag	cgaatctcca	agcactgtgt	cctgaggtag	1680
gcataatggg	gccaaggcaa	caggttggga	gaattgagaa	caatggagga	agagtatctt	1740
ag						1742

<210> 24
 <211> 1004
 <212> DNA
 <213> Human

<400> 24

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tgctgccgcc	gctgctgctg	ggggccttcc	caccggccgc	cgccgccga	ggcccccaa	120
agatggcgga	caaggtggtc	ccacggcagg	tggccggctg	ggccgcactg	tgccgctgca	180
gtgccagtgg	agggggaccc	gccgccgctg	accatgtgga	ccaaggatgg	ccgcaccatc	240
cacagcggct	ggagccgctt	ccgcgtgctg	ccgcaggggc	tgaaggtgaa	gcaggtggag	300
cgggaggatg	ccggcgtgta	cgtgtgcaag	gccaccaacg	gcttcggcag	ccttagcgctc	360
aactacaccc	tcgtcgtgct	ggatgacatt	agcccaggga	aggagagcct	ggggcccgcac	420
agctcctctg	ggggtcaaga	ggaccccgc	agccagcagt	gggcacgacc	gcgcttcaca	480
cagccctcca	agatgaggcg	ccgggtgatc	gcacggcccg	tgggtagctc	cgtgcggctc	540
aagtgcgtgg	ccagcgggca	ccctcggccc	gacatcacgt	ggatgaagga	cgaccaggcc	600
ttgacgcgcc	cagaggccgc	tgagcccagg	aagaagaagt	ggacactgag	cctgaagaac	660
ctgcggcccg	aggacagcgg	caaatacacc	tgccgcgtgt	cgaaccgcgc	gggcgccatc	720
aacgccacct	acaaggtgga	tgtgatccag	cggaccgctt	ccaagcccgt	gctcacaggc	780
acgcaccccc	tgaacacgac	ggtggacttc	ggggggacca	cgtccttcca	gtgcaagggtg	840
cgcagcgacg	tgaagccggt	gatccagtgg	ctgaagcgcg	tggagtacgg	cgccgagggc	900
cgcacaaact	ccaccatcga	tgtgggcggc	cagaagtttg	tggtgctgcc	cacgggtgac	960
gtgtggctcg	ggcccagcgg	ctcctacctc	aataagccgc	tccc		1004

<210> 25
 <211> 478
 <212> DNA
 <213> Mouse

<400> 25

agaaaaaggc	ctcgctaaag	caacaaacct	gatcattttc	aagaaccata	ggactgaggt	60
gaagccatga	agttcttgct	gatctcccta	gccctatggc	tgggcacagt	gggcacacgt	120
gggacagagc	ccgaactcag	cgagacccag	cgcaggagcc	tacaggtggc	tctggaggag	180
ttccacaaac	acccacctgt	gcagttggcc	ttccaagaga	tcggtgtgga	cagagctgaa	240
gaagtgtctt	tctcagctgg	cacctttgtg	aggttggaat	ttaagctcca	gcagaccaac	300

tgccccaaga	aggactggaa	aaagccggag	tgacacatca	aaccaaacgg	ggcggaaatg	360
cctggcctgc	attaaaaatg	accccaaggg	taaaattcta	ggccggatag	tccactgccc	420
aattctgaag	caagggcctc	aggatcctca	ggagttgcaa	tgcatthaaga	tagcacag	478

<210> 26
 <211> 545
 <212> DNA
 <213> Mouse

<400> 26						
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acaaacctga	tcattttcaa	gaaccatagg	actgaggtga	agccatgaag	ttcttgctga	120
tctccctagc	cctatggctg	ggcacagtgg	gcacacgtgg	gacagagccc	gaactcagcg	180
agaccagcg	caggagccta	caggtggctc	tggaggagtt	ccacaaacac	ccacctgtgc	240
agttggcctt	ccaagagatc	ggtgtggaca	gagctgaaga	agtgtctctc	tcagctggca	300
cctttgtgag	gttggaattt	aagctccagc	agaccaactg	ccccaagaag	gactggaaaa	360
agccggagtg	cacaatcaaa	ccaaacggga	gaaggcggaa	atgcctggcc	tgcatthaata	420
tggaacccaa	gggtaaaatt	ctaggccgga	tagtccactg	cccaattctg	aagcaagggc	480
ctcaggatcc	tcaggagttg	caatgcatta	agatagcaca	ggctggcgaa	gacccccacg	540
gctac						545

<210> 27
 <211> 2213
 <212> DNA
 <213> Mouse

<400> 27						
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gtatcccaat	cacatgagag	agcacaacca	attacgtggc	tggctcttcg	atgaaaatga	180
atgggatgaa	cacctgtatc	cagtgtggag	gaggggagac	ggcaggtgga	aggactcctg	240
ggaaggaggc	cgtgtgcagg	cagtcctgac	cagtgactca	ccggctctgg	tgggttccaa	300
tatcaccttt	gtggtgaacc	tgggtgtccc	cagatgccag	aaggaagatg	ctaattggca	360
tatcgtctat	gagaagaact	gcaggaatga	tttgggactg	acctctgacc	tgcatgtcta	420
caactggact	gcaggggcag	atgatggtga	ctgggaagat	ggcaccagcc	gaagccagca	480
tctcaggttc	ccggacagga	ggcccttccc	tcgcccccat	ggatggaaga	aatggagctt	540
tgtctacgtc	tttcacacac	ttggccagta	tttccaaaaa	ctgggtcggt	gttcagcacg	600
ggtttctata	aacacagtca	acttgacagc	tggccctcag	gtcatggaag	tgactgtctt	660
tcgaagatac	ggccgggcat	acattcccat	ctcgaagggt	aaagatgtgt	atgtgataac	720
agatcagatc	ctgttattcg	tgaccatgtc	ccagaagaat	gacaggaact	tgtctgatga	780
gatcttcctc	agagacctcc	ccatcgtctt	cgatgtcctc	attcatgata	ccagccactt	840
cctcaacgac	tctgccattt	cctacaagtg	gaactttggg	gacaacactg	gcctgtttgt	900
ctccaacaat	cacactttga	atcacactta	tgtgtctaat	ggaaccttca	accttaacct	960
caccgtgcaa	actgcagtgc	ccgggccatg	ccctccccct	tcgccttcga	ctccgcctcc	1020
accttcaact	ccgcctcac	ctccgcctcc	acctctgccc	acattatcaa	cacctagccc	1080
ctctttaatg	cctactgggt	acaaatccat	ggagctgagt	gacatttcca	atgaaaactg	1140
ccgaataaac	agatatggct	acttcagagc	caccatcaca	attgtagagg	ggatcctgga	1200
agtcagcatc	atgcagatag	cagatgtccc	catgcccaca	ccgcagcctg	ccaactccct	1260
gatggacttc	actgtgacct	gcaaaggggc	cacccccatg	gaagcctgta	cgatcatctc	1320
cgacccacc	tgccagatcg	cccagaaccg	ggtctgcagc	cctgtggctg	tggatgggct	1380
gtgcctgctg	tctgtgagaa	gagccttcaa	tgggtctggc	acctactgtg	tgaatttcac	1440
tctgggagat	gatgcaagcc	tggccctcac	cagcacccctg	atctctatcc	ctggcaaaga	1500
cccagactcc	cctctgagag	cagtgaatgg	tgctctgate	tccattggct	gcctggctgt	1560
gcttgtcacc	atggttacca	tcttgcgtga	caaaaaacac	aaggcgtaca	agccaatagg	1620
aaactgcctc	aggaacacgg	tcaagggcaa	aggcctgagt	gttctcctca	gccacgcgaa	1680
agccccgttc	ttccgaggag	accaggagaa	ggatccattg	ctccaggaca	agccaaggac	1740
actctaagtc	tttggccttc	cctctgacca	ggaacccact	cttctgtgca	tgtatgtgag	1800

ctgtgcagaa	gatatgtggct	gggaactggt	gttctctaag	gattattgta	aaatgtatat	1860
cgtggccttag	ggagtgtggt	taaatagcac	tttagagaag	acatgggaag	acttagtggt	1920
tcttcccatc	tgtattgtgg	tttttacact	gttcgtgggg	tggacacgct	gtgtctgaag	1980
gggaggtggg	gtcactgcta	cttaagggtcc	taggttaact	gggggagata	ccacagatgc	2040
ctcagctttc	cacataacac	gggcatgaac	ccagctaata	accacctgaa	ggccatgctt	2100
catctgcctt	ccaactcact	gagcatgcct	gagctcctga	caaaattata	atgggcccgg	2160
gctttgtgta	tgggtgcgtgt	gtgtacatat	tctactcatt	aaaaaggtag	tct	2213

<210> 28
 <211> 412
 <212> DNA
 <213> Mouse

<400> 28							
gcggagtc	ccc	gcctgcgcgc	ccctcgagcg	ccccagctt	ctctgctggc	cggaacctgc	60
accccgaa	acc	aggaagcacc	tggcgggcggg	cgcgggatgg	ctggggcccag	ctgggggtctc	120
cctcggttg	g	acggtttcat	ccttaccgag	cgcctgggca	gtggcacgta	cgccacggtg	180
tacaaggct	c	acgccaagaa	ggatactcgg	gaagtggtag	ccataaaatg	cgtggccaag	240
aagagtctc	a	acaaggcgtc	agtggaaaac	ctcctgactg	agattgagat	cctcaagggc	300
attcggcacc	c	cccatatcgt	gcagctgaaa	gacttccagt	gggacaatga	caatatctac	360
ctcatcatgg	a	gtttctgtgc	aggggggtgac	ctgtctcgct	tcattcatac	cc	412

<210> 29
 <211> 437
 <212> DNA
 <213> Mouse

<400> 29						
cacagtcttg	tttctggtgg	ctttgatcac	tgtggggatg	aacactacct	atgtagtgtc	60
ttgccccaaa	gaatttgaaa	aacctggagc	ttgtcccaag	ccttcaccag	aaagtgttgg	120
aatttgtgtt	gatcaatgct	caggagatgg	atcctgccct	ggcaacatga	agtgtgttag	180
caatagctgt	ggtcatgtct	gcaaaactcc	tgtcttttaa	atggttgaca	gccatgtgga	240
agatggattc	aatcttcata	aacatgaatg	atggccagcc	ccagaagatt	tcttctgaat	300
tcacagagcc	tgtgcttggc	tacttcctag	ccctagaatt	gcattcttgg	acaaggaaga	360
tctatattgt	ggtgacaatg	ccctaatatg	tctgtgtcca	aaataaacta	cccttagcat	420
tcaaaaaaaaa	aaaaaaaa					437

<210> 30
 <211> 126
 <212> PRT
 <213> Mouse

<220>
 <221> UNSURE
 <222> (123)...(123)

<400> 30															
Val	Asp	Phe	Gly	Gly	Thr	Thr	Ser	Phe	Gln	Cys	Lys	Val	Arg	Ser	Asp
1				5					10					15	
Val	Lys	Pro	Val	Ile	Gln	Trp	Leu	Lys	Arg	Val	Glu	Tyr	Gly	Ser	Glu
			20				25						30		
Gly	Arg	His	Asn	Ser	Thr	Ile	Asp	Val	Gly	Gly	Gln	Lys	Phe	Val	Val
		35				40					45				
Leu	Pro	Thr	Gly	Asp	Val	Trp	Ser	Arg	Pro	Asp	Gly	Ser	Tyr	Leu	Asn
	50				55					60					
Lys	Leu	Leu	Ile	Ser	Arg	Ala	Arg	Gln	Asp	Asp	Ala	Gly	Met	Tyr	Ile
65					70				75					80	

Cys Leu Gly Ala Asn Thr Met Gly Tyr Ser Phe Arg Ser Ala Phe Leu
85 90 95
Thr Val Leu Pro Asp Pro Lys Pro Pro Gly Pro Pro Met Ala Ser Ser
100 105 110
Ser Ser Ser Thr Ser Leu Pro Trp Pro Val Xaa Gly Ile Pro
115 120 125

<210> 31
<211> 529
<212> PRT
<213> Mouse

<400> 31

Met Thr Arg Ser Pro Ala Leu Leu Leu Leu Leu Leu Gly Ala Leu Pro
1 5 10 15
Ser Ala Glu Ala Ala Arg Gly Pro Pro Arg Met Ala Asp Lys Val Val
20 25 30
Pro Arg Gln Val Ala Arg Leu Gly Arg Thr Val Arg Leu Gln Cys Pro
35 40 45
Val Glu Gly Asp Pro Pro Pro Leu Thr Met Trp Thr Lys Asp Gly Arg
50 55 60
Thr Ile His Ser Gly Trp Ser Arg Phe Arg Val Leu Pro Gln Gly Leu
65 70 75 80
Lys Val Lys Glu Val Glu Ala Glu Asp Ala Gly Val Tyr Val Cys Lys
85 90 95
Ala Thr Asn Gly Phe Gly Ser Leu Ser Val Asn Tyr Thr Leu Ile Ile
100 105 110
Met Asp Asp Ile Ser Pro Gly Lys Glu Ser Pro Gly Pro Gly Gly Ser
115 120 125
Ser Gly Gly Gln Glu Asp Pro Ala Ser Gln Gln Trp Ala Arg Pro Arg
130 135 140
Phe Thr Gln Pro Ser Lys Met Arg Arg Arg Val Ile Ala Arg Pro Val
145 150 155 160
Gly Ser Ser Val Arg Leu Lys Cys Val Ala Ser Gly His Pro Arg Pro
165 170 175
Asp Ile Met Trp Met Lys Asp Asp Gln Thr Leu Thr His Leu Glu Ala
180 185 190
Ser Glu His Arg Lys Lys Lys Trp Thr Leu Ser Leu Lys Asn Leu Lys
195 200 205
Pro Glu Asp Ser Gly Lys Tyr Thr Cys Arg Val Ser Asn Lys Ala Gly
210 215 220
Ala Ile Asn Ala Thr Tyr Lys Val Asp Val Ile Gln Arg Thr Arg Ser
225 230 235 240
Lys Pro Val Leu Thr Gly Thr His Pro Val Asn Thr Thr Val Asp Phe
245 250 255
Gly Gly Thr Thr Ser Phe Gln Cys Lys Val Arg Ser Asp Val Lys Pro
260 265 270
Val Ile Gln Trp Leu Lys Arg Val Glu Tyr Gly Ser Glu Gly Arg His
275 280 285
Asn Ser Thr Ile Asp Val Gly Gly Gln Lys Phe Val Val Leu Pro Thr
290 295 300
Gly Asp Val Trp Ser Arg Pro Asp Gly Ser Tyr Leu Asn Lys Leu Leu
305 310 315 320
Ile Ser Arg Ala Arg Gln Asp Asp Ala Gly Met Tyr Ile Cys Leu Gly
325 330 335
Ala Asn Thr Met Gly Tyr Ser Phe Arg Ser Ala Phe Leu Thr Val Leu
340 345 350

Pro Asp Pro Lys Pro Pro Gly Pro Pro Met Ala Ser Ser Ser Ser Ser
 355 360 365
 Thr Ser Leu Pro Trp Pro Val Val Ile Gly Ile Pro Ala Gly Ala Val
 370 375 380
 Phe Ile Leu Gly Thr Val Leu Leu Trp Leu Cys Gln Thr Lys Lys Lys
 385 390 395 400
 Pro Cys Ala Pro Ala Ser Thr Leu Pro Val Pro Gly His Arg Pro Pro
 405 410 415
 Gly Thr Ser Arg Glu Arg Ser Gly Asp Lys Asp Leu Pro Ser Leu Ala
 420 425 430
 Val Gly Ile Cys Glu Glu His Gly Ser Ala Met Ala Pro Gln His Ile
 435 440 445
 Leu Ala Ser Gly Ser Thr Ala Gly Pro Lys Leu Tyr Pro Lys Leu Tyr
 450 455 460
 Thr Asp Val His Thr His Thr His Thr His Thr Cys Thr His Thr Leu
 465 470 475 480
 Ser Cys Gly Gly Gln Gly Ser Ser Thr Pro Ala Cys Pro Leu Ser Val
 485 490 495
 Leu Asn Thr Ala Asn Leu Gln Ala Leu Cys Pro Glu Val Gly Ile Trp
 500 505 510
 Gly Pro Arg Gln Gln Val Gly Arg Ile Glu Asn Asn Gly Gly Arg Val
 515 520 525
 Ser

<210> 32
 <211> 439
 <212> PRT
 <213> Mouse

<400> 32

Met Thr Arg Ser Pro Ala Leu Leu Leu Leu Leu Leu Gly Ala Leu Pro
 1 5 10 15
 Ser Ala Glu Ala Ala Arg Asp Asp Ile Ser Pro Gly Lys Glu Ser Pro
 20 25 30
 Gly Pro Gly Gly Ser Ser Gly Gly Gln Glu Asp Pro Ala Ser Gln Gln
 35 40 45
 Trp Ala Arg Pro Arg Phe Thr Gln Pro Ser Lys Met Arg Arg Arg Val
 50 55 60
 Ile Ala Arg Pro Val Gly Ser Ser Val Arg Leu Lys Cys Val Ala Ser
 65 70 75 80
 Gly His Pro Arg Pro Asp Ile Met Trp Met Lys Asp Asp Gln Thr Leu
 85 90 95
 Thr His Leu Glu Ala Ser Glu His Arg Lys Lys Lys Trp Thr Leu Ser
 100 105 110
 Leu Lys Asn Leu Lys Pro Glu Asp Ser Gly Lys Tyr Thr Cys Arg Val
 115 120 125
 Ser Asn Lys Ala Gly Ala Ile Asn Ala Thr Tyr Lys Val Asp Val Ile
 130 135 140
 Gln Arg Thr Arg Ser Lys Pro Val Leu Thr Gly Thr His Pro Val Asn
 145 150 155 160
 Thr Thr Val Asp Phe Gly Gly Thr Thr Ser Phe Gln Cys Lys Val Arg
 165 170 175
 Ser Asp Val Lys Pro Val Ile Gln Trp Leu Lys Arg Val Glu Tyr Gly
 180 185 190
 Ser Glu Gly Arg His Asn Ser Thr Ile Asp Val Gly Gly Gln Lys Phe
 195 200 205

Val Val Leu Pro Thr Gly Asp Val Trp Ser Arg Pro Asp Gly Ser Tyr
 210 215 220
 Leu Asn Lys Leu Leu Ile Ser Arg Ala Arg Gln Asp Asp Ala Gly Met
 225 230 235 240
 Tyr Ile Cys Leu Gly Ala Asn Thr Met Gly Tyr Ser Phe Arg Ser Ala
 245 250 255
 Phe Leu Thr Val Leu Pro Asp Pro Lys Pro Pro Pro Gly Pro Pro Met
 260 265 270
 Ala Ser Ser Ser Ser Ser Thr Ser Leu Pro Trp Pro Val Val Ile Gly
 275 280 285
 Ile Pro Ala Gly Ala Val Phe Ile Leu Gly Thr Val Leu Leu Trp Leu
 290 295 300
 Cys Gln Thr Lys Lys Lys Pro Cys Ala Pro Ala Ser Thr Leu Pro Val
 305 310 315 320
 Pro Gly His Arg Pro Pro Gly Thr Ser Arg Glu Arg Ser Gly Asp Lys
 325 330 335
 Asp Leu Pro Ser Leu Ala Val Gly Ile Cys Glu Glu His Gly Ser Ala
 340 345 350
 Met Ala Pro Gln His Ile Leu Ala Ser Gly Ser Thr Ala Gly Pro Lys
 355 360 365
 Leu Tyr Pro Lys Leu Tyr Thr Asp Val His Thr His Thr His Thr His
 370 375 380
 Thr Cys Thr His Thr Leu Ser Cys Gly Gly Gln Gly Ser Ser Thr Pro
 385 390 395 400
 Ala Cys Pro Leu Ser Val Leu Asn Thr Ala Asn Leu Gln Ala Leu Cys
 405 410 415
 Pro Glu Val Gly Ile Trp Gly Pro Arg Gln Gln Val Gly Arg Ile Glu
 420 425 430
 Asn Asn Gly Gly Arg Val Ser
 435

<210> 33
 <211> 322
 <212> PRT
 <213> Human

<400> 33

Arg Arg Ala Pro Cys Cys Cys Ser Cys Cys Arg Arg Cys Cys Trp Gly
 1 5 10 15
 Pro Ser His Arg Pro Pro Pro Pro Glu Ala Pro Gln Arg Trp Arg Thr
 20 25 30
 Arg Trp Ser His Gly Arg Trp Pro Ala Gly Pro His Cys Ala Ala Ala
 35 40 45
 Val Pro Val Glu Gly Asp Pro Pro Pro Leu Thr Met Trp Thr Lys Asp
 50 55 60
 Gly Arg Thr Ile His Ser Gly Trp Ser Arg Phe Arg Val Leu Pro Gln
 65 70 75 80
 Gly Leu Lys Val Lys Gln Val Glu Arg Glu Asp Ala Gly Val Tyr Val
 85 90 95
 Cys Lys Ala Thr Asn Gly Phe Gly Ser Leu Ser Val Asn Tyr Thr Leu
 100 105 110
 Val Val Leu Asp Asp Ile Ser Pro Gly Lys Glu Ser Leu Gly Pro Asp
 115 120 125
 Ser Ser Ser Gly Gly Gln Glu Asp Pro Ala Ser Gln Gln Trp Ala Arg
 130 135 140
 Pro Arg Phe Thr Gln Pro Ser Lys Met Arg Arg Arg Val Ile Ala Arg
 145 150 155 160

Pro Val Gly Ser Ser Val Arg Leu Lys Cys Val Ala Ser Gly His Pro
 165 170 175
 Arg Pro Asp Ile Thr Trp Met Lys Asp Asp Gln Ala Leu Thr Arg Pro
 180 185 190
 Glu Ala Ala Glu Pro Arg Lys Lys Lys Trp Thr Leu Ser Leu Lys Asn
 195 200 205
 Leu Arg Pro Glu Asp Ser Gly Lys Tyr Thr Cys Arg Val Ser Asn Arg
 210 215 220
 Ala Gly Ala Ile Asn Ala Thr Tyr Lys Val Asp Val Ile Gln Arg Thr
 225 230 235 240
 Arg Ser Lys Pro Val Leu Thr Gly Thr His Pro Val Asn Thr Thr Val
 245 250 255
 Asp Phe Gly Gly Thr Thr Ser Phe Gln Cys Lys Val Arg Ser Asp Val
 260 265 270
 Lys Pro Val Ile Gln Trp Leu Lys Arg Val Glu Tyr Gly Ala Glu Gly
 275 280 285
 Arg His Asn Ser Thr Ile Asp Val Gly Gly Gln Lys Phe Val Val Leu
 290 295 300
 Pro Thr Gly Asp Val Trp Ser Arg Pro Asp Gly Ser Tyr Leu Asn Lys
 305 310 315 320
 Pro Leu

<210> 34
 <211> 102
 <212> PRT
 <213> Mouse

<400> 34

Met Lys Phe Leu Leu Ile Ser Leu Ala Leu Trp Leu Gly Thr Val Gly
 1 5 10 15
 Thr Arg Gly Thr Glu Pro Glu Leu Ser Glu Thr Gln Arg Arg Ser Leu
 20 25 30
 Gln Val Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Leu Ala
 35 40 45
 Phe Gln Glu Ile Gly Val Asp Arg Ala Glu Glu Val Leu Phe Ser Ala
 50 55 60
 Gly Thr Phe Val Arg Leu Glu Phe Lys Leu Gln Thr Asn Cys Pro
 65 70 75 80
 Lys Lys Asp Trp Lys Lys Pro Glu Cys Thr Ile Lys Pro Asn Gly Ala
 85 90 95
 Glu Met Pro Gly Leu His
 100

<210> 35
 <211> 147
 <212> PRT
 <213> Mouse

<400> 35

Met Lys Phe Leu Leu Ile Ser Leu Ala Leu Trp Leu Gly Thr Val Gly
 1 5 10 15
 Thr Arg Gly Thr Glu Pro Glu Leu Ser Glu Thr Gln Arg Arg Ser Leu
 20 25 30
 Gln Val Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Leu Ala
 35 40 45
 Phe Gln Glu Ile Gly Val Asp Arg Ala Glu Glu Val Leu Phe Ser Ala

50		55		60
Gly Thr Phe Val Arg	Leu Glu Phe Lys Leu Gln	Gln Thr Asn Cys Pro		
65	70	75	80	
Lys Lys Asp Trp Lys	Pro Glu Cys Thr Ile Lys	Pro Asn Gly Arg		
	85	90	95	
Arg Arg Lys Cys Leu	Ala Cys Ile Lys Met Asp	Pro Lys Gly Lys Ile		
	100	105	110	
Leu Gly Arg Ile Val	His Cys Pro Ile Leu Lys	Gln Gly Pro Gln Asp		
	115	120	125	
Pro Gln Glu Leu Gln	Cys Ile Lys Ile Ala Gln	Ala Gly Glu Asp Pro		
	130	135	140	
His Gly Tyr				
145				

<210> 36
 <211> 574
 <212> PRT
 <213> Mouse

<400> 36

Met Glu Ser Leu Cys Gly Val Leu Gly Phe Leu Leu Leu Ala Ala Gly	
1	5 10 15
Leu Pro Leu Gln Ala Ala Lys Arg Phe Arg Asp Val Leu Gly His Glu	
	20 25 30
Gln Tyr Pro Asn His Met Arg Glu His Asn Gln Leu Arg Gly Trp Ser	
	35 40 45
Ser Asp Glu Asn Glu Trp Asp Glu His Leu Tyr Pro Val Trp Arg Arg	
	50 55 60
Gly Asp Gly Arg Trp Lys Asp Ser Trp Glu Gly Gly Arg Val Gln Ala	
65	70 75 80
Val Leu Thr Ser Asp Ser Pro Ala Leu Val Gly Ser Asn Ile Thr Phe	
	85 90 95
Val Val Asn Leu Val Phe Pro Arg Cys Gln Lys Glu Asp Ala Asn Gly	
	100 105 110
Asn Ile Val Tyr Glu Lys Asn Cys Arg Asn Asp Leu Gly Leu Thr Ser	
	115 120 125
Asp Leu His Val Tyr Asn Trp Thr Ala Gly Ala Asp Asp Gly Asp Trp	
	130 135 140
Glu Asp Gly Thr Ser Arg Ser Gln His Leu Arg Phe Pro Asp Arg Arg	
145	150 155 160
Pro Phe Pro Arg Pro His Gly Trp Lys Lys Trp Ser Phe Val Tyr Val	
	165 170 175
Phe His Thr Leu Gly Gln Tyr Phe Gln Lys Leu Gly Arg Cys Ser Ala	
	180 185 190
Arg Val Ser Ile Asn Thr Val Asn Leu Thr Ala Gly Pro Gln Val Met	
	195 200 205
Glu Val Thr Val Phe Arg Arg Tyr Gly Arg Ala Tyr Ile Pro Ile Ser	
	210 215 220
Lys Val Lys Asp Val Tyr Val Ile Thr Asp Gln Ile Pro Val Phe Val	
225	230 235 240
Thr Met Ser Gln Lys Asn Asp Arg Asn Leu Ser Asp Glu Ile Phe Leu	
	245 250 255
Arg Asp Leu Pro Ile Val Phe Asp Val Leu Ile His Asp Pro Ser His	
	260 265 270
Phe Leu Asn Asp Ser Ala Ile Ser Tyr Lys Trp Asn Phe Gly Asp Asn	
	275 280 285
Thr Gly Leu Phe Val Ser Asn Asn His Thr Leu Asn His Thr Tyr Val	

290	295	300
Leu Asn Gly Thr Phe Asn Leu Asn Leu Thr Val Gln Thr Ala Val Pro		
305	310	315
Gly Pro Cys Pro Pro Pro Ser Pro Ser Thr Pro Pro Pro Ser Thr		320
	325	330
Pro Pro Ser Pro Pro Pro Ser Pro Leu Pro Thr Leu Ser Thr Pro Ser		335
	340	345
Pro Ser Leu Met Pro Thr Gly Tyr Lys Ser Met Glu Leu Ser Asp Ile		350
	355	360
Ser Asn Glu Asn Cys Arg Ile Asn Arg Tyr Gly Tyr Phe Arg Ala Thr		365
	370	375
Ile Thr Ile Val Glu Gly Ile Leu Glu Val Ser Ile Met Gln Ile Ala		380
385	390	395
Asp Val Pro Met Pro Thr Pro Gln Pro Ala Asn Ser Leu Met Asp Phe		400
	405	410
Thr Val Thr Cys Lys Gly Ala Thr Pro Met Glu Ala Cys Thr Ile Ile		415
	420	425
Ser Asp Pro Thr Cys Gln Ile Ala Gln Asn Arg Val Cys Ser Pro Val		430
	435	440
Ala Val Asp Gly Leu Cys Leu Leu Ser Val Arg Arg Ala Phe Asn Gly		445
	450	455
Ser Gly Thr Tyr Cys Val Asn Phe Thr Leu Gly Asp Asp Ala Ser Leu		460
465	470	475
Ala Leu Thr Ser Thr Leu Ile Ser Ile Pro Gly Lys Asp Pro Asp Ser		480
	485	490
Pro Leu Arg Ala Val Asn Gly Val Leu Ile Ser Ile Gly Cys Leu Ala		495
	500	505
Val Leu Val Thr Met Val Thr Ile Leu Leu Tyr Lys Lys His Lys Ala		510
	515	520
Tyr Lys Pro Ile Gly Asn Cys Pro Arg Asn Thr Val Lys Gly Lys Gly		525
	530	535
Leu Ser Val Leu Leu Ser His Ala Lys Ala Pro Phe Phe Arg Gly Asp		540
545	550	555
Gln Glu Lys Asp Pro Leu Leu Gln Asp Lys Pro Arg Thr Leu		560
	565	570

<210> 37
 <211> 137
 <212> PRT
 <213> Mouse

<400> 37

Ala Glu Ser Arg Leu Ala Ala Pro Arg Ala Pro Pro Ala Ser Leu Leu	
1	5
Ala Gly Thr Cys Thr Pro Asn Gln Glu Ala Pro Gly Gly Gly Arg Gly	
	10
	15
	20
Met Ala Gly Pro Ser Trp Gly Leu Pro Arg Leu Asp Gly Phe Ile Leu	
	25
	30
	35
Thr Glu Arg Leu Gly Ser Gly Thr Tyr Ala Thr Val Tyr Lys Ala Tyr	
	40
	45
	50
	55
	60
Ala Lys Lys Asp Thr Arg Glu Val Val Ala Ile Lys Cys Val Ala Lys	
65	70
	75
	80
Lys Ser Leu Asn Lys Ala Ser Val Glu Asn Leu Leu Thr Glu Ile Glu	
	85
	90
	95
Ile Leu Lys Gly Ile Arg His Pro His Ile Val Gln Leu Lys Asp Phe	
	100
	105
	110
Gln Trp Asp Asn Asp Asn Ile Tyr Leu Ile Met Glu Phe Cys Ala Gly	

115 120 125
 Gly Asp Leu Ser Arg Phe Ile His Thr
 130 135

<210> 38
 <211> 72
 <212> PRT
 <213> Mouse

<400> 38
 Thr Val Leu Phe Leu Val Ala Leu Ile Thr Val Gly Met Asn Thr Thr
 1 5 10 15
 Tyr Val Val Ser Cys Pro Lys Glu Phe Glu Lys Pro Gly Ala Cys Pro
 20 25 30
 Lys Pro Ser Pro Glu Ser Val Gly Ile Cys Val Asp Gln Cys Ser Gly
 35 40 45
 Asp Gly Ser Cys Pro Gly Asn Met Lys Cys Cys Ser Asn Ser Cys Gly
 50 55 60
 His Val Cys Lys Thr Pro Val Phe
 65 70

<210> 39
 <211> 1587
 <212> DNA
 <213> Mouse

<400> 39
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 gttggactcc tgggcgtcgt gtggctgctg cgcttgggcc acggcgagga gcggcgggccg 120
 gagacagcgg cacagcgtcg cttctgccag gttagtgggt acctggacga ctgtacctgt 180
 gatgtcgaga ccacgcataa gtttaataac tacagacttt tcccaagact acaaaagctt 240
 cttgaaagtg actacttttag atattacaag gtgaacttga agaagccttg tcctttctgg 300
 aatgacatca accagtgtgg aagaagagac tgtgccgtca aaccctgcca ttctgatgaa 360
 gttcctgatg gaattaagtc tgcgagctac aagtattctg aggaagccaa ccgcattgaa 420
 gaatgtgagc aagctgagcg acttggagcc gtggatgagt ctctgagtga ggagaccag 480
 aaagctgtac ttcaagtggac caagcatgat gattcgtcag acagcttctg cgaaattgac 540
 gatatacagt ccccgatgc tgagtatgtg gacttactcc ttaaccctga gcgctacaca 600
 ggctacaagg ggccagacgc ttggaggata tggagtgtca tctatgaaga aaactgtttt 660
 aagccacaga caattcaaag gcctttggct tctgggcgag gaaaaagtaa agagaacaca 720
 ttttacaact ggctagaagg cctctgtgta gaaaagagag cattctacag acttatatct 780
 ggctgcacg caagcattaa tgtgcatttg agtgcaaggt atcttttaca agatacttgg 840
 ctggaaaaga aatgggggtca caatgtcaca gagttccagc agcgctttga tgggattctg 900
 actgaaggag aaggcccacg aaggctgagg aacttgtact tcctgtacct gatagagtaa 960
 agggctctct ccaaagtgtc tccatttttt gagcgtccag attttcagct cttcactggg 1020
 aataaagttc aggatgcaga aaacaaagcg ttacttctgg agatacttca tgaaatcaag 1080
 tcatttcctt tgcacttcga tgagaattct ttttttgcgt gggataaaaa cgaagcacat 1140
 aaactaaagg aggacttccg gctacacttt aggaacatct caagaatcat ggactgtgtt 1200
 ggctgcttca agtgccgcct gtggggcaag cttcagacgc aggggctggg cactgctctg 1260
 aagatcttgt tttccgaaaa actgatcgca aatatgccgg aaagcggacc aagttatgag 1320
 ttccagctaa ccagacaaga aatagtatca ctgtttaatg catttggaag gatttccaca 1380
 agtgtgagag aactagagaa cttcaggcac ttgttacaga atgttactg aggaggacgg 1440
 ttggaatgtg cctgtttctg cacaggggaa tttgaagggc aaaatctctt ttagcccat 1500
 ggttgcaatg tactgtccta agcccaacgt ttatataaac ctgcttttgt taaagaaaaa 1560
 aaaaaaaaaa aaaaaaaaaa aaaaaaa 1587

<210> 40
 <211> 2435

<212> DNA
<213> Mouse

<400> 40

ggaggaggct	cggcgccccc	ctcctggccc	cctccccccc	ggtgctggct	ccatgtctgt	60
gtgaccggcc	gcaggggtag	gattcaggcc	cgacgcgggg	cgggcgggcg	acggcggctg	120
aggtgagagg	cggcgggcggc	ggcgcgggctc	gggcaccggc	ccccagcgg	gaggatgaag	180
cggcggaacg	ccgactgcag	taagctccgc	cgccccctga	agcgggaaccg	gatcaccgag	240
ggtatctacg	gcagtacatt	tttatacctg	aaattcctgg	tagtggtggc	acttgtcctc	300
cttgccgact	ttgtcctgga	gttccgattt	gaatacctgt	ggcggttctg	gcttttcctc	360
agaagcgtct	atgattcctt	cagataccaa	ggactggcct	tctcagtatt	ttttgtttgt	420
gtagcattca	cttcaaatat	catatgtctc	ctcttcattc	ccatacaatg	gctttttttc	480
gctgctagca	catatgtatg	ggtccagtag	gtatggcaca	cagaaagggg	agtgtgtttg	540
cctacagtgt	cactctggat	cctctttgtt	tatattgaag	cagcaattag	atttaaagat	600
ctgaaaaact	ttcatgtaga	cctttgtcga	ccgtttgctg	ctcactgcat	tggataccct	660
gtggtgactt	tgggctttgg	cttcaaaaagt	tatgtgagct	acaaaatgcg	gttaaggaag	720
cagaaggaag	ttcagaagga	gaacgagttt	tacatgcagc	ttcttcagca	ggccctccct	780
ccagagcagc	aaatgttgca	gaagcaggag	aaggaggctg	aggaagcagc	caagggattg	840
ccgacatgg	attcctcgat	ccttatacac	cacaacggag	gcatcccgag	caacaaaaaa	900
ctgtccacaa	cgttgccaga	gatagaatat	cgagaaaaag	ggaaagagaa	ggacaaggat	960
gccaagaaac	acaaccttgg	aataaataac	aacaacattc	tacaacctgt	agactctaag	1020
atacaagaga	ttgagtatat	ggaaaacccat	atcaatagta	aaagattaaa	caatgatctt	1080
gtgggaagta	cagaaaaatct	cttaaaaagag	gactcatgca	ctgcttcctc	aaaaaattac	1140
aaaaatgcc	gtggagtgtg	gaactcctcg	cctcgaagtc	acagcgctac	aaatggaagc	1200
attccttcct	cgtctagtaa	aaacgagaag	aagcagaagt	gcaccagcaa	gggcccagct	1260
gcacacaagg	acttaatgga	gaactgtatt	cctaacaacc	agctgagcaa	accagacgcg	1320
ctggtaaggc	tggacaaga	cattaaaaag	ctaaaggctg	acctgcaagc	cagccggcaa	1380
gtggagcaag	agctgcgcag	tcagatcagc	gccctctcaa	gcacagagcg	aggcatccgc	1440
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gtgcaaata	agcaaaaaga	caagcagaat	atcagccagc	tagagaagaa	gctaaaggct	1560
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acggaaacct	tacggagtcg	gatcagagag	ctagaagctg	agggcaagaa	gctcacaatg	1740
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aagtacaaag	aaaacgagaa	ggacaccgag	gtattgatgt	cagccctctc	cgccatgcaa	1860
gacaaaacgc	aacacctaga	gaacagtctc	agcgcagaga	cgaggatcaa	gctggacctc	1920
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aaagaccagg	aatcaagga	cctaaaacag	aaaatagctg	aagtcattgg	tgtcatgccc	2040
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aagtttgtgg	agaccagccc	ctctggactt	gaccctaattg	cctctgtcta	ccagcccttg	2160
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gtcattttta	aaggggggaa	ataacatcca	agtctgatta	gaaccgcccc	tcagttgttc	2340
ttggaagttt	ttagaagacc	tcacggactt	tgcagtttat	ttttgttggc	caacacatta	2400
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<210> 41
<211> 1720
<212> DNA
<213> Mouse

<400> 41

gtgacgcgca	ggcccaggcg	gaagtgcggg	cggaggatcc	cgagccggat	cccagaccgg	60
gcgcggggct	cggggctcgc	aggagcggct	ggctcccgcg	atggcgagcc	tatgggtgcg	120
aaacctgctg	cggctgggct	cggggctcaa	catgtcctgc	ctggcgctgt	cgggtgctgt	180
gctcgcgcag	ctgacaggcg	ccgccaagaa	ttttgaagat	gtgagatgta	aatgcatctg	240
ccctccctat	aaagagaatc	ctgggcacat	ttataataag	aatatatctc	agaaagattg	300

tgattgcctt	catgtcgtgg	agcccatgcc	tgtacgggga	cctgatgtag	aagcatactg	360
tctacgctgt	gaatgcaa	acgaagagag	aagctctgtc	acaatcaagg	ttaccattat	420
aatttatctc	tctatcttgg	gccttctgct	tctgtacatg	gtatatctta	ccttaggtga	480
gcccatacctg	aagaggcgcc	tctttggaca	ctcccagctg	ttgcagagcg	atgatgacgt	540
tggggatcac	cagccttttg	caaatgcccc	tgatgtgctg	gcccgtcttc	gcagccgagc	600
caatgttcta	aacaagggtg	agtacgctca	gcagcgctgg	aagctccagg	tccaggagca	660
gcgaaagtct	gtcttcgacc	gacacgttgt	cctcagctaa	ctgggaactg	gaatcagggtg	720
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catgtttgtt	tttacaatc	cttgctggat	ggagggaagac	tccaaactgg	aagcaaacc	840
catgcttggt	atcttctgt	taatatatta	atagagacat	ttttacagca	cacagttcca	900
agtcaaccag	taagtctttt	cctacttggt	acttttacta	ataaaattaa	gctgcctgtg	960
agttatcttg	aagccccgtg	cctggaacaa	gctctctctt	tcttgccaca	cagttctaac	1020
ttggtgttca	agataacttc	caggtgtgtt	tttgcttctc	tttcttggg	tgggagagag	1080
aggggaaggat	gccttgggag	tgcttgagta	gcttctcaag	tgtcttttcc	agacagactt	1140
atgaatactt	cagaccctct	acttcacact	tgtaaatgtc	ccagtgtagc	tggcttgtca	1200
gcgtgctggc	ctccccactt	gacttttgca	ctgactacat	tacctaatg	tctggttagc	1260
ctgtggctgc	atttcatgac	cagttggatc	tgaaatgcct	gggggctcct	cacaaaatga	1320
agatttgttt	catgcactgt	gatgtctgac	gcaacatggt	ctagaacaga	ctggccatct	1380
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tagtagctct	aaggacttga	acatttagaa	taaagacatt	ttctcttaag	cccaagcctc	1500
cctggatgat	tgacgtacaa	atactgatca	gccttttctg	tcttgctgag	aggcagttct	1560
ttgaactgat	gtgggcagct	ttgaacaagg	actagagttc	agattgcctc	tctctgagaa	1620
gtctaacagt	tattggataa	ctggcttttt	tcttcttaca	tctcttttgg	aatgtaacaa	1680
taaaataatt	tacaaaacc	aaaaaaaaa	aaaaaaaaa			1720

<210> 42
 <211> 1008
 <212> DNA
 <213> Mouse

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catgggacct	ctccaccagt	ttctcctgct	gctgatcaca	gccctgtccc	aagccctcaa	120
caccacggtg	ctgcagggca	tggccggcca	gtccttgagg	gtgtcatgta	cttatgacgc	180
cttgaagcac	tgggggagac	gcaaggcctg	gtgtcggcag	ctgggtgagg	agggcccatg	240
ccagcgtgtg	gtgagcacac	acggtgtgtg	gctgctggcc	ttcctgaaga	agcggaatgg	300
gagcacagtc	atcgcagatg	acacccttgc	tggaaaccgtc	accatcactc	tgaagaacct	360
ccaagccggt	gacgcggggc	tctaccagtg	tcagagtctc	cgaggccgag	aggctgaggt	420
cctgcagaaa	gtactggtgg	agggtgctgga	ggaccctcta	gatgaccaag	atgctggaga	480
tctctgggtc	cccaggaggt	catcgagttt	cgagggtgcc	caagtggaa	acagcacctc	540
caggaatcaa	gagacctcct	tcccaccac	ctccattctt	ctcctcctgg	cctgcgttct	600
cctgagcaag	tttcttgcag	ccagcatcct	ctgggctgtg	gccaggggca	ggcagaagcc	660
gggaacacct	gtggtcagag	ggctggactg	tggccaagat	gctgggcacc	aacttcagat	720
cctcactgga	cccggaggta	cgtgagagaa	ttctgagtgg	gaggagaact	acagcttaag	780
tccagccagg	agtcaatcca	gcctgcatgc	tctccctcc	tccaccaaga	cttctgtttc	840
tgctactttt	gcttcagagg	ccgctcttgc	ctcaagccca	cctatcctgg	gagcaggaat	900
actgggtgtg	acatctgtgt	tgagtgggga	agacagctgg	atgggtgtct	gtcaagttct	960
gcacttttga	cattaaacat	tctccacaca	ccaaaaaaa	aaaaaaa		1008

<210> 43
 <211> 1871
 <212> DNA
 <213> Mouse

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accatgggga	ccggggctgg	tgggcccagag	gtcctgggcgc	tgctgttcgc	cgtgtgtgtct	120

gtggcgggccg	tgggtggccgc	cgtggcgggc	gcggtgtcga	gcttcgtggc	ctatcagcgg	480
cggcgcctgt	gcttccgcga	ggcgggctcc	gccccgtgt	agatgacgcc	atggccccgc	540
ccctccggggc	atcatcgccc	cctccagggc	cccgatgaca	tcactgacgc	tgctcatttg	600
catacgcgct	ccgccccgct	gtgacgtcac	tgacccccgc	cccggcctcg	cctgaatatg	660
caaatagtcg	gccccgcctc	cgcccgtaa	atcacgcct	gcaccgcccc	tcgcccgtgc	720
atcagtgatg	tcactactgc	caaagactcc	gcccacaact	gacctctgac	cccggtgaca	780
tcataacctc	cactcacaag	gagccatcat	gggcagcccc	ctgtctcagc	tcagcatccc	840
ctccaggaca	ggaaggggcg	gagcctgaag	gccggggggc	ggaccggaaa	taaaggcgga	900
gttttgtaaa	aaaaaaaaaa	aaaaa				925

<210> 46
 <211> 1423
 <212> DNA
 <213> Mouse

<400> 46						
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gatgaccaga	ccttgacgca	tctagaggct	agtgaacaca	gaaagaagaa	gtggacactg	120
agcttgaaga	acctgaagcc	tgaagacagt	ggcaagtaca	cgtgccgtgt	atctaacaag	180
gccggtgcc	tcaacgccac	ctacaaagtg	gatgtaatcc	gtgagtgggtg	ggctctgtggt	240
aggacagggg	cccgtgggtgc	ctaaaactgt	gctgacatgt	ttgtttttcc	ttggcttaga	300
gcggactcgt	tccaagcctg	tgctcacagg	gacacaccct	gtgaacacaa	cggtggactt	360
cggtgggaca	acgtccttcc	agtgaagggt	gcgcagtgac	gtgaagcctg	tgatccagtg	420
gctgaagcgg	gtggagtacg	gctccgaggg	acgccacaac	tccaccattg	atgtgggtgg	480
ccagaagttt	gtggtgttgc	ccacgggtga	tgtgtggtca	cggcctgatg	gctcctacct	540
caacaagctg	ctcatctctc	gggcccgcga	ggatgatgct	ggcatgtaca	tctgcctagg	600
tgcaaatacc	atgggctaca	gtttccgtag	cgccttcctc	actgtattac	cagggtgtgtg	660
tgtgggctgc	ccaccccatg	tttactctca	gtctctacca	ttggtctggg	ctgtcctggg	720
gttccccaat	gtccacttag	caagtggggc	ctccctatcc	ttttcccttc	gttgtgggtt	780
atccttgctt	catagggagt	tcaggggtgc	tgcccatata	gttcacattt	gggctgggtg	840
ccccattaat	atagggacat	tctgtccctt	actcttcttc	ttaatctctc	ttgcagaccc	900
caaacctcca	gggcctccta	tggcttcttc	atcgtcatcc	acaagcctgc	catggcctgt	960
gggtgatcggc	atcccagctg	gtgctgtctt	cactctaggc	actgtgctgc	tctggctttg	1020
ccagaccaag	aagaagccat	gtgccccagc	atctacactt	cctgtgcctg	ggcatcgtcc	1080
cccagggaca	tcccagaaac	gcagtgggtga	caaggacctg	ccctcattgg	ctgtgggcat	1140
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tggccccaag	ctgtacccca	agctatacac	agatgtgcac	acacacacac	atacacacac	1260
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agtgtctaat	acagcgaatc	tccaagcact	gtgtcctgag	gtaggcatat	ggggggccaag	1380
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<210> 47
 <211> 464
 <212> PRT
 <213> Mouse

<400> 47																	
Met	Gly	Arg	Ala	Trp	Gly	Leu	Leu	Val	Gly	Leu	Leu	Gly	Val	Val	Trp		
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Leu	Leu	Arg	Leu	Gly	His	Gly	Glu	Glu	Arg	Arg	Pro	Glu	Thr	Ala	Ala		
			20					25					30				
Gln	Arg	Cys	Phe	Cys	Gln	Val	Ser	Gly	Tyr	Leu	Asp	Asp	Cys	Thr	Cys		
			35					40					45				
Asp	Val	Glu	Thr	Ile	Asp	Lys	Phe	Asn	Asn	Tyr	Arg	Leu	Phe	Pro	Arg		
			50					55				60					
Leu	Gln	Lys	Leu	Leu	Glu	Ser	Asp	Tyr	Phe	Arg	Tyr	Tyr	Lys	Val	Asn		
65						70					75				80		

Leu Lys Lys Pro Cys Pro Phe Trp Asn Asp Ile Asn Gln Cys Gly Arg
 85 90 95
 Arg Asp Cys Ala Val Lys Pro Cys His Ser Asp Glu Val Pro Asp Gly
 100 105 110
 Ile Lys Ser Ala Ser Tyr Lys Tyr Ser Glu Glu Ala Asn Arg Ile Glu
 115 120 125
 Glu Cys Glu Gln Ala Glu Arg Leu Gly Ala Val Asp Glu Ser Leu Ser
 130 135 140
 Glu Glu Thr Gln Lys Ala Val Leu Gln Trp Thr Lys His Asp Asp Ser
 145 150 155 160
 Ser Asp Ser Phe Cys Glu Ile Asp Asp Ile Gln Ser Pro Asp Ala Glu
 165 170 175
 Tyr Val Asp Leu Leu Leu Asn Pro Glu Arg Tyr Thr Gly Tyr Lys Gly
 180 185 190
 Pro Asp Ala Trp Arg Ile Trp Ser Val Ile Tyr Glu Glu Asn Cys Phe
 195 200 205
 Lys Pro Gln Thr Ile Gln Arg Pro Leu Ala Ser Gly Arg Gly Lys Ser
 210 215 220
 Lys Glu Asn Thr Phe Tyr Asn Trp Leu Glu Gly Leu Cys Val Glu Lys
 225 230 235 240
 Arg Ala Phe Tyr Arg Leu Ile Ser Gly Leu His Ala Ser Ile Asn Val
 245 250 255
 His Leu Ser Ala Arg Tyr Leu Leu Gln Asp Thr Trp Leu Glu Lys Lys
 260 265 270
 Trp Gly His Asn Val Thr Glu Phe Gln Gln Arg Phe Asp Gly Ile Leu
 275 280 285
 Thr Glu Gly Glu Gly Pro Arg Arg Leu Arg Asn Leu Tyr Phe Leu Tyr
 290 295 300
 Leu Ile Glu Leu Arg Ala Leu Ser Lys Val Leu Pro Phe Phe Glu Arg
 305 310 315 320
 Pro Asp Phe Gln Leu Phe Thr Gly Asn Lys Val Gln Asp Ala Glu Asn
 325 330 335
 Lys Ala Leu Leu Leu Glu Ile Leu His Glu Ile Lys Ser Phe Pro Leu
 340 345 350
 His Phe Asp Glu Asn Ser Phe Phe Ala Gly Asp Lys Asn Glu Ala His
 355 360 365
 Lys Leu Lys Glu Asp Phe Arg Leu His Phe Arg Asn Ile Ser Arg Ile
 370 375 380
 Met Asp Cys Val Gly Cys Phe Lys Cys Arg Leu Trp Gly Lys Leu Gln
 385 390 395 400
 Thr Gln Gly Leu Gly Thr Ala Leu Lys Ile Leu Phe Ser Glu Lys Leu
 405 410 415
 Ile Ala Asn Met Pro Glu Ser Gly Pro Ser Tyr Glu Phe Gln Leu Thr
 420 425 430
 Arg Gln Glu Ile Val Ser Leu Phe Asn Ala Phe Gly Arg Ile Ser Thr
 435 440 445
 Ser Val Arg Glu Leu Glu Asn Phe Arg His Leu Leu Gln Asn Val His
 450 455 460

<210> 48
 <211> 664
 <212> PRT
 <213> Mouse

<400> 48

Met Lys Arg Arg Asn Ala Asp Cys Ser Lys Leu Arg Arg Pro Leu Lys
 1 5 10 15

Arg Asn Arg Ile Thr Glu Gly Ile Tyr Gly Ser Thr Phe Leu Tyr Leu
 20 25 30
 Lys Phe Leu Val Val Trp Ala Leu Val Leu Leu Ala Asp Phe Val Leu
 35 40 45
 Glu Phe Arg Phe Glu Tyr Leu Trp Pro Phe Trp Leu Phe Ile Arg Ser
 50 55 60
 Val Tyr Asp Ser Phe Arg Tyr Gln Gly Leu Ala Phe Ser Val Phe Phe
 65 70 75 80
 Val Cys Val Ala Phe Thr Ser Asn Ile Ile Cys Leu Leu Phe Ile Pro
 85 90 95
 Ile Gln Trp Leu Phe Phe Ala Ala Ser Thr Tyr Val Trp Val Gln Tyr
 100 105 110
 Val Trp His Thr Glu Arg Gly Val Cys Leu Pro Thr Val Ser Leu Trp
 115 120 125
 Ile Leu Phe Val Tyr Ile Glu Ala Ala Ile Arg Phe Lys Asp Leu Lys
 130 135 140
 Asn Phe His Val Asp Leu Cys Arg Pro Phe Ala Ala His Cys Ile Gly
 145 150 155 160
 Tyr Pro Val Val Thr Leu Gly Phe Gly Phe Lys Ser Tyr Val Ser Tyr
 165 170 175
 Lys Met Arg Leu Arg Lys Gln Lys Glu Val Gln Lys Glu Asn Glu Phe
 180 185 190
 Tyr Met Gln Leu Leu Gln Gln Ala Leu Pro Pro Glu Gln Gln Met Leu
 195 200 205
 Gln Lys Gln Glu Lys Glu Ala Glu Glu Ala Ala Lys Gly Leu Pro Asp
 210 215 220
 Met Asp Ser Ser Ile Leu Ile His His Asn Gly Gly Ile Pro Ala Asn
 225 230 235 240
 Lys Lys Leu Ser Thr Thr Leu Pro Glu Ile Glu Tyr Arg Glu Lys Gly
 245 250 255
 Lys Glu Lys Asp Lys Asp Ala Lys Lys His Asn Leu Gly Ile Asn Asn
 260 265 270
 Asn Asn Ile Leu Gln Pro Val Asp Ser Lys Ile Gln Glu Ile Glu Tyr
 275 280 285
 Met Glu Asn His Ile Asn Ser Lys Arg Leu Asn Asn Asp Leu Val Gly
 290 295 300
 Ser Thr Glu Asn Leu Leu Lys Glu Asp Ser Cys Thr Ala Ser Ser Lys
 305 310 315 320
 Asn Tyr Lys Asn Ala Ser Gly Val Val Asn Ser Ser Pro Arg Ser His
 325 330 335
 Ser Ala Thr Asn Gly Ser Ile Pro Ser Ser Ser Lys Asn Glu Lys
 340 345 350
 Lys Gln Lys Cys Thr Ser Lys Gly Pro Ser Ala His Lys Asp Leu Met
 355 360 365
 Glu Asn Cys Ile Pro Asn Asn Gln Leu Ser Lys Pro Asp Ala Leu Val
 370 375 380
 Arg Leu Glu Gln Asp Ile Lys Lys Leu Lys Ala Asp Leu Gln Ala Ser
 385 390 395 400
 Arg Gln Val Glu Gln Glu Leu Arg Ser Gln Ile Ser Ala Leu Ser Ser
 405 410 415
 Thr Glu Arg Gly Ile Arg Ser Glu Met Gly Gln Leu Arg Gln Glu Asn
 420 425 430
 Glu Leu Leu Gln Asn Lys Leu His Asn Ala Val Gln Met Lys Gln Lys
 435 440 445
 Asp Lys Gln Asn Ile Ser Gln Leu Glu Lys Lys Leu Lys Ala Glu Gln
 450 455 460
 Glu Ala Arg Ser Phe Val Glu Lys Gln Leu Met Glu Glu Lys Lys Arg

465 470 475 480
 Lys Lys Leu Glu Glu Ala Thr Ala Ala Arg Ala Val Ala Phe Ala Ala
 485 490 495
 Ala Ser Arg Gly Glu Cys Thr Glu Thr Leu Arg Ser Arg Ile Arg Glu
 500 505 510
 Leu Glu Ala Glu Gly Lys Lys Leu Thr Met Asp Met Lys Val Lys Glu
 515 520 525
 Glu Gln Ile Arg Glu Leu Glu Leu Lys Val Gln Glu Leu Arg Lys Tyr
 530 535 540
 Lys Glu Asn Glu Lys Asp Thr Glu Val Leu Met Ser Ala Leu Ser Ala
 545 550 555 560
 Met Gln Asp Lys Thr Gln His Leu Glu Asn Ser Leu Ser Ala Glu Thr
 565 570 575
 Arg Ile Lys Leu Asp Leu Phe Ser Ala Leu Gly Asp Ala Lys Arg Gln
 580 585 590
 Leu Glu Ile Ala Gln Gly Gln Ile Leu Gln Lys Asp Gln Glu Ile Lys
 595 600 605
 Asp Leu Lys Gln Lys Ile Ala Glu Val Met Ala Val Met Pro Ser Ile
 610 615 620
 Thr Tyr Ser Ala Ala Thr Ser Pro Leu Ser Pro Val Ser Pro His Tyr
 625 630 635 640
 Ser Ser Lys Phe Val Glu Thr Ser Pro Ser Gly Leu Asp Pro Asn Ala
 645 650 655
 Ser Val Tyr Gln Pro Leu Lys Lys
 660

<210> 49
 <211> 199
 <212> PRT
 <213> Mouse

<400> 49

Met Ala Ser Leu Trp Cys Gly Asn Leu Leu Arg Leu Gly Ser Gly Leu
 1 5 10 15
 Asn Met Ser Cys Leu Ala Leu Ser Val Leu Leu Leu Ala Gln Leu Thr
 20 25 30
 Gly Ala Ala Lys Asn Phe Glu Asp Val Arg Cys Lys Cys Ile Cys Pro
 35 40 45
 Pro Tyr Lys Glu Asn Pro Gly His Ile Tyr Asn Lys Asn Ile Ser Gln
 50 55 60
 Lys Asp Cys Asp Cys Leu His Val Val Glu Pro Met Pro Val Arg Gly
 65 70 75 80
 Pro Asp Val Glu Ala Tyr Cys Leu Arg Cys Glu Cys Lys Tyr Glu Glu
 85 90 95
 Arg Ser Ser Val Thr Ile Lys Val Thr Ile Ile Ile Tyr Leu Ser Ile
 100 105 110
 Leu Gly Leu Leu Leu Leu Tyr Met Val Tyr Leu Thr Leu Val Glu Pro
 115 120 125
 Ile Leu Lys Arg Arg Leu Phe Gly His Ser Gln Leu Leu Gln Ser Asp
 130 135 140
 Asp Asp Val Gly Asp His Gln Pro Phe Ala Asn Ala His Asp Val Leu
 145 150 155 160
 Ala Arg Ser Arg Ser Arg Ala Asn Val Leu Asn Lys Val Glu Tyr Ala
 165 170 175
 Gln Gln Arg Trp Lys Leu Gln Val Gln Glu Gln Arg Lys Ser Val Phe
 180 185 190
 Asp Arg His Val Val Leu Ser

195

<210> 50
 <211> 227
 <212> PRT
 <213> Mouse

<400> 50

Met	Gly	Pro	Leu	His	Gln	Phe	Leu	Leu	Leu	Leu	Ile	Thr	Ala	Leu	Ser
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Gln	Ala	Leu	Asn	Thr	Thr	Val	Leu	Gln	Gly	Met	Ala	Gly	Gln	Ser	Leu
			20					25					30		
Arg	Val	Ser	Cys	Thr	Tyr	Asp	Ala	Leu	Lys	His	Trp	Gly	Arg	Arg	Lys
		35					40					45			
Ala	Trp	Cys	Arg	Gln	Leu	Gly	Glu	Glu	Gly	Pro	Cys	Gln	Arg	Val	Val
	50					55					60				
Ser	Thr	His	Gly	Val	Trp	Leu	Leu	Ala	Phe	Leu	Lys	Lys	Arg	Asn	Gly
65					70				75					80	
Ser	Thr	Val	Ile	Ala	Asp	Asp	Thr	Leu	Ala	Gly	Thr	Val	Thr	Ile	Thr
				85					90					95	
Leu	Lys	Asn	Leu	Gln	Ala	Gly	Asp	Ala	Gly	Leu	Tyr	Gln	Cys	Gln	Ser
		100						105					110		
Leu	Arg	Gly	Arg	Glu	Ala	Glu	Val	Leu	Gln	Lys	Val	Leu	Val	Glu	Val
		115					120						125		
Leu	Glu	Asp	Pro	Leu	Asp	Asp	Gln	Asp	Ala	Gly	Asp	Leu	Trp	Val	Pro
	130					135					140				
Glu	Glu	Ser	Ser	Ser	Phe	Glu	Gly	Ala	Gln	Val	Glu	His	Ser	Thr	Ser
145					150					155					160
Arg	Asn	Gln	Glu	Thr	Ser	Phe	Pro	Pro	Thr	Ser	Ile	Leu	Leu	Leu	Leu
				165					170					175	
Ala	Cys	Val	Leu	Leu	Ser	Lys	Phe	Leu	Ala	Ala	Ser	Ile	Leu	Trp	Ala
			180					185					190		
Val	Ala	Arg	Gly	Arg	Gln	Lys	Pro	Gly	Thr	Pro	Val	Val	Arg	Gly	Leu
		195					200					205			
Asp	Cys	Gly	Gln	Asp	Ala	Gly	His	Gln	Leu	Gln	Ile	Leu	Thr	Gly	Pro
	210					215					220				
Gly	Gly	Thr													
225															

<210> 51
 <211> 503
 <212> PRT
 <213> Mouse

<400> 51

Met	Gly	Thr	Gly	Ala	Gly	Gly	Pro	Ser	Val	Leu	Ala	Leu	Leu	Phe	Ala
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Val	Cys	Ala	Pro	Leu	Arg	Leu	Gln	Ala	Glu	Glu	Leu	Gly	Asp	Gly	Cys
			20					25					30		
Gly	His	Ile	Val	Thr	Ser	Gln	Asp	Ser	Gly	Thr	Met	Thr	Ser	Lys	Asn
		35					40					45			
Tyr	Pro	Gly	Thr	Tyr	Pro	Asn	Tyr	Thr	Val	Cys	Glu	Lys	Ile	Ile	Thr
	50					55					60				
Val	Pro	Lys	Gly	Lys	Arg	Leu	Ile	Leu	Arg	Leu	Gly	Asp	Leu	Asn	Ile
65					70				75					80	
Glu	Ser	Lys	Thr	Cys	Ala	Ser	Asp	Tyr	Leu	Leu	Phe	Ser	Ser	Ala	Thr
				85					90					95	

100 105 110 115 120 125 130 135 140 145 150 155 160 165 170 175 180 185 190 195 200 205 210 215 220 225 230 235 240 245 250 255 260 265 270 275 280 285 290 295 300 305 310 315 320 325 330 335 340 345 350 355 360 365 370 375 380 385 390 395 400 405 410 415 420 425 430 435 440 445 450 455 460 465 470 475 480 485 490 495 500

Asp Gln Tyr Gly Pro Tyr Cys Gly Ser Trp Ala Val Pro Lys Glu Leu
 Arg Leu Asn Ser Asn Glu Val Thr Val Leu Phe Lys Ser Gly Ser His
 Ile Ser Gly Arg Gly Phe Leu Leu Thr Tyr Ala Ser Ser Asp His Pro
 Asp Leu Ile Thr Cys Leu Glu Arg Gly Ser His Tyr Phe Glu Glu Lys
 Tyr Ser Lys Phe Cys Pro Ala Gly Cys Arg Asp Ile Ala Arg Asp Ile
 Ser Gly Asn Thr Lys Asp Gly Tyr Arg Asp Thr Ser Leu Leu Cys Lys
 Ala Ala Ile His Ala Gly Ile Ile Thr Asp Glu Leu Gly Gly His Ile
 Asn Leu Leu Gln Ser Lys Gly Ile Ser His Tyr Glu Gly Leu Leu Ala
 Asn Gly Val Leu Ser Arg His Gly Ser Leu Ser Glu Lys Arg Phe Leu
 Phe Thr Thr Pro Gly Met Asn Ile Thr Thr Val Ala Ile Pro Ser Val
 Ile Phe Ile Ala Leu Leu Leu Thr Gly Met Gly Ile Phe Ala Ile Cys
 Arg Lys Arg Lys Lys Lys Gly Asn Pro Tyr Val Ser Ala Asp Ala Gln
 Lys Thr Gly Cys Trp Lys Gln Ile Lys Tyr Pro Phe Ala Arg His Gln
 Ser Thr Glu Phe Thr Ile Ser Tyr Asp Asn Glu Lys Glu Met Thr Gln
 Lys Leu Asp Leu Ile Thr Ser Asp Met Ala Asp Tyr Gln Gln Pro Leu
 Met Ile Gly Thr Gly Thr Val Ala Arg Lys Gly Ser Thr Phe Arg Pro
 Met Asp Thr Asp Thr Glu Glu Val Arg Val Asn Thr Glu Ala Ser Gly
 His Tyr Asp Cys Pro His Arg Pro Gly Arg His Glu Tyr Ala Leu Pro
 Leu Thr His Ser Glu Pro Glu Tyr Ala Thr Pro Ile Val Glu Arg His
 Leu Leu Arg Ala His Thr Phe Ser Thr Gln Ser Gly Tyr Arg Val Pro
 Gly Pro Arg Pro Thr His Glu His Ser His Ser Ser Gly Gly Phe Pro
 Pro Ala Thr Gly Ala Thr Gln Val Glu Ser Tyr Gln Arg Pro Ala Ser
 Pro Lys Pro Val Gly Gly Gly Tyr Asp Lys Pro Ala Ala Ser Ser Phe
 Leu Asp Ser Arg Asp Pro Ala Ser Gln Ser Gln Met Thr Ser Gly Gly
 Asp Asp Gly Tyr Ser Ala Pro Arg Asn Gly Leu Ala Pro Leu Asn Gln
 Thr Ala Met Thr Ala Leu Leu

<210> 52
 <211> 757
 <212> PRT
 <213> Mouse

[illegible][illegible]

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 85 90 95
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 100 105 110
 Asp Glu Gly Gly His Gly Gly Ala Gly Gly Ala Glu Pro Glu Gly Thr
 115 120 125
 Pro Gln Gly Leu Val Pro Gly Val Val Ala Ala Val Val Ala Ala Val
 130 135 140
 Ala Gly Ala Val Ser Ser Phe Val Ala Tyr Gln Arg Arg Arg Leu Cys
 145 150 155 160
 Phe Arg Glu Gly Gly Ser Ala Pro Val
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 <211> 30
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 54
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<210> 55
 <211> 35
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Made in a lab

<400> 55
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<210> 56
 <211> 37
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Made in a lab

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 <213> Artificial Sequence

<220>
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<400> 57
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<210> 58
 <211> 3503
 <212> DNA
 <213> Mouse

<400> 58

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ggacggtttc	atccttaccg	agcgccctggg	cagtggcacg	tacgccacgg	tgtacaaggc	240
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caacaaggcg	tcagtggaaa	acctcctgac	tgagattgag	atcctcaagg	gcattcggca	360
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<210> 59
 <211> 311
 <212> PRT
 <213> Mouse

<400> 59

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Met Ala Gly Pro Ser Trp Gly Leu Pro Arg Leu Asp Gly Phe Ile Leu
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Thr Glu Arg Leu Gly Ser Gly Thr Tyr Ala Thr Val Tyr Lys Ala Tyr
20     25     30
Ala Lys Lys Asp Thr Arg Glu Val Val Ala Ile Lys Cys Val Ala Lys
35     40     45
Lys Ser Leu Asn Lys Ala Ser Val Glu Asn Leu Leu Thr Glu Ile Glu
50     55     60
Ile Leu Lys Gly Ile Arg His Pro His Ile Val Gln Leu Lys Asp Phe
65     70     75     80
Gln Trp Asp Asn Asp Asn Ile Tyr Leu Ile Met Glu Phe Cys Ala Gly
85     90     95
Gly Asp Leu Ser Arg Phe Ile His Thr Arg Arg Ile Leu Pro Glu Lys
100    105    110
Val Ala Arg Val Phe Met Gln Gln Leu Ala Ser Ala Leu Gln Phe Leu
115    120    125
His Glu Arg Asn Ile Ser His Leu Asp Leu Lys Pro Gln Asn Ile Leu
130    135    140
Leu Ser Ser Leu Glu Lys Pro His Leu Lys Leu Ala Asp Phe Gly Phe
145    150    155    160
Ala Gln His Met Ser Pro Trp Asp Glu Lys His Val Leu Arg Gly Ser
165    170    175
Pro Leu Tyr Met Ala Pro Glu Met Val Cys Arg Arg Gln Tyr Asp Ala
180    185    190
Arg Val Asp Leu Trp Ser Val Gly Val Ile Leu Tyr Glu Ala Leu Phe
195    200    205
Gly Gln Pro Pro Phe Ala Ser Arg Ser Phe Ser Glu Leu Glu Glu Lys
210    215    220
Ile Arg Ser Asn Arg Val Ile Glu Val Arg Leu Ala Gly Ser Arg His
225    230    235    240
Pro Pro Gly Ile Glu Gly Leu Lys Ala Gln Lys Phe Val Gln His Cys
245    250    255
Ser Ala Gly Ser Gly Pro Phe Met Ala Val Gly His Val Leu Trp Trp
260    265    270
Lys Pro Arg Val Trp Ser Val Pro Glu Asp Pro Tyr Gln Pro Arg Gln
275    280    285
Ala Thr Asn Asp Gln Ala Gln Ser Ser His Ser Pro Gly Leu Glu Ala
290    295    300
Asn Thr His Leu Ile Gly Asp
305    310

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<210> 60
 <211> 373
 <212> PRT
 <213> Mouse

<400> 60

Met	Thr	Arg	Ser	Pro	Ala	Leu	Leu	Leu	Leu	Leu	Gly	Ala	Leu	Pro
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Ser	Ala	Glu	Ala	Arg	Gly	Pro	Pro	Arg	Met	Ala	Asp	Lys	Val	Val
		20					25					30		
Pro	Arg	Gln	Val	Ala	Arg	Leu	Gly	Arg	Thr	Val	Arg	Leu	Gln	Cys
		35					40					45		Pro
Val	Glu	Gly	Asp	Pro	Pro	Pro	Leu	Thr	Met	Trp	Thr	Lys	Asp	Gly
		50				55					60			Arg
Thr	Ile	His	Ser	Gly	Trp	Ser	Arg	Phe	Arg	Val	Leu	Pro	Gln	Gly
65				70					75					80
Lys	Val	Lys	Glu	Val	Glu	Ala	Glu	Asp	Ala	Gly	Val	Tyr	Val	Cys
				85					90					95
Ala	Thr	Asn	Gly	Phe	Gly	Ser	Leu	Ser	Val	Asn	Tyr	Thr	Leu	Ile
			100					105					110	Ile
Met	Asp	Asp	Ile	Ser	Pro	Gly	Lys	Glu	Ser	Pro	Gly	Pro	Gly	Gly
		115				120						125		Ser
Ser	Gly	Gly	Gln	Glu	Asp	Pro	Ala	Ser	Gln	Gln	Trp	Ala	Arg	Pro
	130					135					140			Arg
Phe	Thr	Gln	Pro	Ser	Lys	Met	Arg	Arg	Arg	Val	Ile	Ala	Arg	Pro
145					150					155				160
Gly	Ser	Ser	Val	Arg	Leu	Lys	Cys	Val	Ala	Ser	Gly	His	Pro	Arg
				165					170				175	Pro
Asp	Ile	Met	Trp	Met	Lys	Asp	Asp	Gln	Thr	Leu	Thr	His	Leu	Glu
		180						185					190	Ala
Ser	Glu	His	Arg	Lys	Lys	Lys	Trp	Thr	Leu	Ser	Leu	Lys	Asn	Leu
		195					200					205		Lys
Pro	Glu	Asp	Ser	Gly	Lys	Tyr	Thr	Cys	Arg	Val	Ser	Asn	Lys	Ala
	210					215					220			Gly
Ala	Ile	Asn	Ala	Thr	Tyr	Lys	Val	Asp	Val	Ile	Gln	Arg	Thr	Arg
225					230					235				240
Lys	Pro	Val	Leu	Thr	Gly	Thr	His	Pro	Val	Asn	Thr	Thr	Val	Asp
				245						250				255
Gly	Gly	Thr	Thr	Ser	Phe	Gln	Cys	Lys	Val	Arg	Ser	Asp	Val	Lys
		260						265					270	Pro
Val	Ile	Gln	Trp	Leu	Lys	Arg	Val	Glu	Tyr	Gly	Ser	Glu	Gly	Arg
		275						280				285		His
Asn	Ser	Thr	Ile	Asp	Val	Gly	Gly	Gln	Lys	Phe	Val	Val	Leu	Pro
	290					295					300			Thr
Gly	Asp	Val	Trp	Ser	Arg	Pro	Asp	Gly	Ser	Tyr	Leu	Asn	Lys	Leu
305					310					315				320
Ile	Ser	Arg	Ala	Arg	Gln	Asp	Asp	Ala	Gly	Met	Tyr	Ile	Cys	Leu
				325					330					335
Ala	Asn	Thr	Met	Gly	Tyr	Ser	Phe	Arg	Ser	Ala	Phe	Leu	Thr	Val
		340						345				350		Leu
Pro	Asp	Pro	Lys	Pro	Pro	Gly	Pro	Pro	Met	Ala	Ser	Ser	Ser	Ser
		355					360					365		
Thr	Ser	Leu	Pro	Trp										
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<210> 61
 <211> 135

<212> PRT
 <213> Mouse

<400> 61

Cys	Gln	Thr	Lys	Lys	Lys	Pro	Cys	Ala	Pro	Ala	Ser	Thr	Leu	Pro	Val
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Pro	Gly	His	Arg	Pro	Pro	Gly	Thr	Ser	Arg	Glu	Arg	Ser	Gly	Asp	Lys
			20					25					30		
Asp	Leu	Pro	Ser	Leu	Ala	Val	Gly	Ile	Cys	Glu	Glu	His	Gly	Ser	Ala
		35					40					45			
Met	Ala	Pro	Gln	His	Ile	Leu	Ala	Ser	Gly	Ser	Thr	Ala	Gly	Pro	Lys
	50					55					60				
Leu	Tyr	Pro	Lys	Leu	Tyr	Thr	Asp	Val	His	Thr	His	Thr	His	Thr	His
65					70					75					80
Thr	Cys	Thr	His	Thr	Leu	Ser	Cys	Gly	Gly	Gln	Gly	Ser	Ser	Thr	Pro
				85				90						95	
Ala	Cys	Pro	Leu	Ser	Val	Leu	Asn	Thr	Ala	Asn	Leu	Gln	Ala	Leu	Cys
			100					105					110		
Pro	Glu	Val	Gly	Ile	Trp	Gly	Pro	Arg	Gln	Gln	Val	Gly	Arg	Ile	Glu
		115					120					125			
Asn	Asn	Gly	Gly	Arg	Val	Ser									
	130					135									